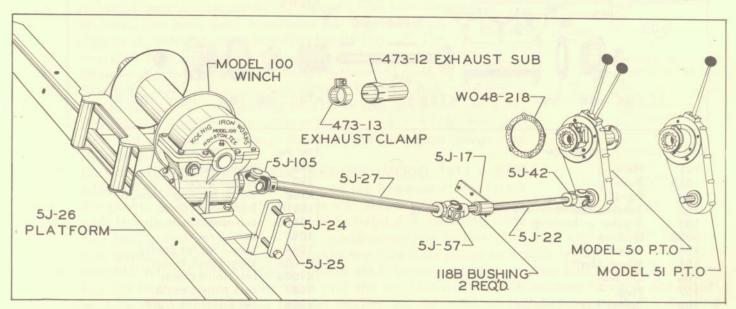
MODELS 150J and 151J KING WINCH POWER TAKE-OFF DRIVEN FRONT MOUNT WINCHES FOR CJ-5 WILLYS JEEP

ALL KING WINCHES ARE INTERCHANGEABLE WITH CJ-5 AND CJ-6

The only difference between Model 150J and 151J KING Winch Assemblies is the power take-off. Model 150J has a Model 50 Power Take-off which allows any equipment to be driven on the Jeep with full use of the Jeep power through the regular transmission speeds without interference, in any way, with the front mount winch drive. When the winch is being used, the rear power take-off shaft will rotate.

The Model 151J KING Winch Assembly has a Model 51 Power Take-off which provides for drive to the front of Jeep only. This source of power to the front may be used for other purposes in addition to driving the Model 100 KING Winch, within the capacity of the unit.

NOTE Model 130J is identical with Model 131J is identical with Model 151J—
Except for adaptor brackets and spacers under the winch supplied with Models 130J and 131J.



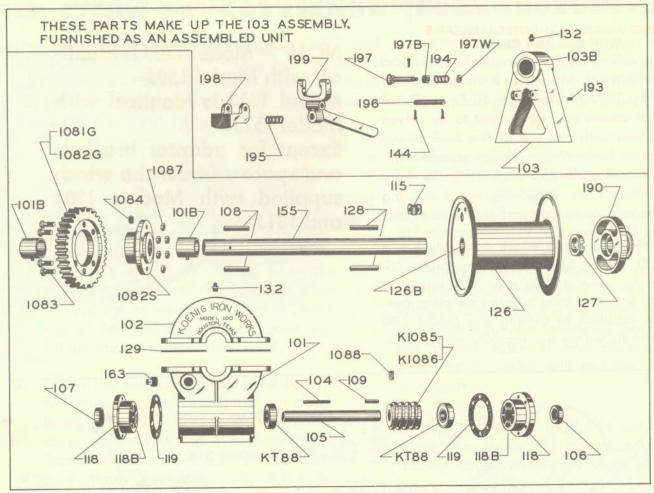
INSTALLATION PARTS MODELS 150J and 151J KING WINCH

PART No.	DESCRIPTION	PART No.	DESCRIPTION
5J15	Bag of Installation Bolts, Keys, etc.	5J105	Front Universal Joint
5J17	Bearing		7/8-1/4 KW x 7/8-3/16 KW
5J22	Rear Drive Shaft 22" Long	118B	Bushing (2 req'd)
5J24	Platform Clamp Bolt (4 reg'd)	913	1/4 x 1 Woodruff Key (5 req'd)
5J25	Platform Clamp	473-12	Exhaust Pipe Sub
5J26	Winch Platform	473-13	Exhaust Pipe Clamp
5J27	Front Drive Shaft—27%" Long	W048-218	P.T.O. Gasket
5J42	Rear Universal Joint	15312	Cable 150' 5/16" 6x19 with
	%-1/4 KW x 1"-1/4 KW		Hook and Clamps
5J57	Center Universal Joint	Model 50	Power Take-off
	78-1/4 KW x 78-1/4 KW	Model 51	Power Take-off



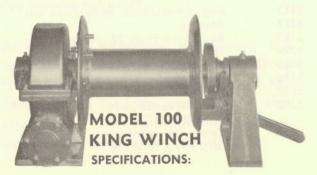
IRON WORKS INC.

MODEL 100 KING WINCH* PARTS



PART No.	DESCRIPTION
101	Housing
101B	Bushing
102	Cover
103	Bracket Assembly—see note on drawing
103	Bracket w/bushing
103B	Bushing
104	Worm Key
105	Worm Shaft
106	Oil Seal
107	Plug
108	Spider Keys-2 req'd
109	Key
115	Cable Clamp
118	Bearing Holder w/bushing—2 req'd
118B	Bushing-2 req'd
119	Gasket—4 req'd
126	Drum w/bushings
126B	Bushings-2 req'd
127	Drum Set Collar
128	Clutch Keys—2 req'd
129	Cover Gasket—1 pr. req'd
132	Grease Fittings—3 req'd
144	Cotter Pin-3 req'd
155	Drum Shaft
163	Grease Filler Plug
190	Drum Clutch
193	Screw Set for 197
194	Spring
195	Brake Spring
196	Pin
197	Pin
197B	Bushing
197W	Washer
* Copyrigh	ited

PART No.	DESCRIPTION
198	Brake Shoe
199	Shifter Lever
KT88	Thrust Bearing—2 req'd
†1081G	Right Hand Gear
†1082G	Left Hand Gear
1083	Bolt-6 reg'd
1084	Screw Set for Spider
†K1085	Right Hand Worm
†K1086	Left Hand Worm
1087	Lock Nut-6 req'd
1088	Set Screw for Worm
10825	Spider
	ordering gear or worm, order by number

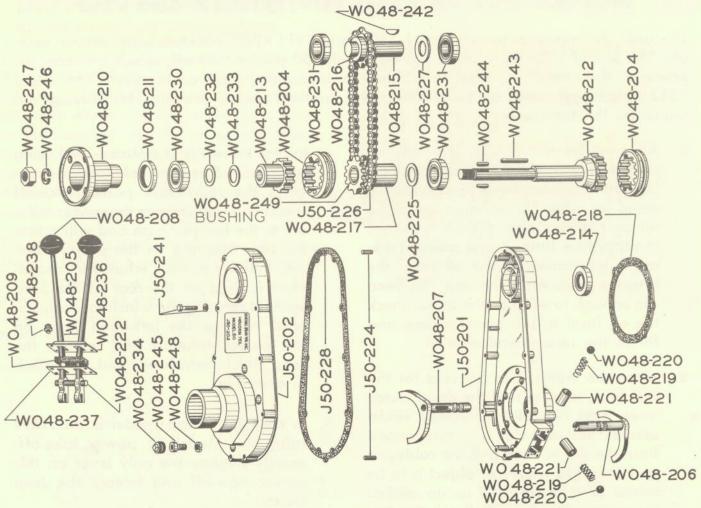


Gear Ratio—36 to 1
Recommended Cable—5/16" 6x19 plow steel, hemp center
Drum Capacity—150' 5/16" Cable
Pulling Capacity—8000 lbs.
Hoisting Capacity—1500 lbs. on single line; 3000 lbs. on

Weight-49 lbs. Recommended Oil-EP140

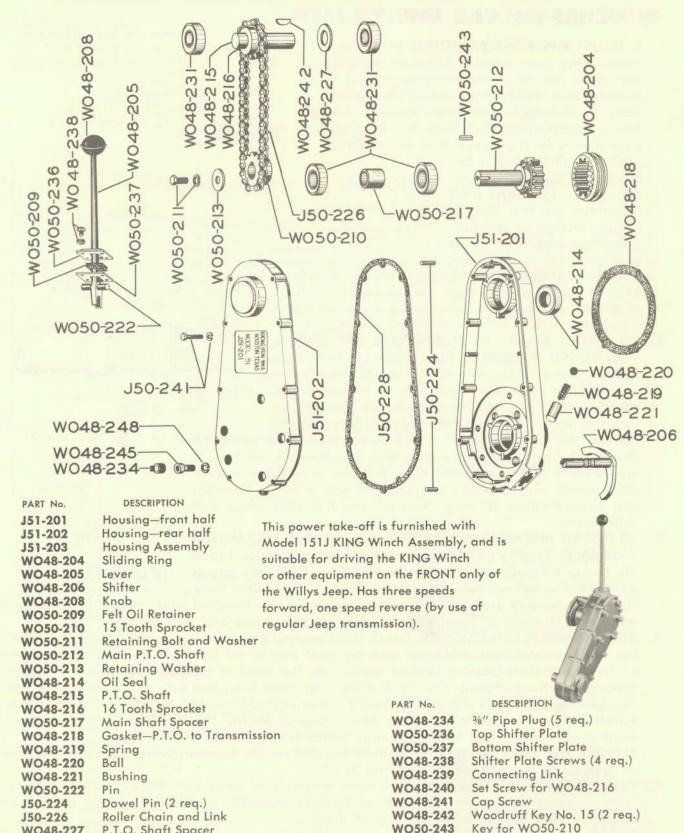
double line

MODEL 50 POWER TAKE-OFF FOR WILLYS JEEP



J50-201 Housing—front half J50-202 Housing—rear half J50-203 Housing Assembly WO48-204 Sliding Ring (2 req.) WO48-205 Lever (2 req.) WO48-206 Shifter—to engine WO48-207 Shifter—for winch WO48-208 Knobs (2 req.) WO48-209 Felt oil retainer for levers WO48-209 Felt oil retainer for levers WO48-209 (by use of regular Jeep transmission).				W040220	
J50-202 Housing—rear half J50-203 Housing Assembly WO48-204 Sliding Ring (2 req.) WO48-205 Lever (2 req.) WO48-206 Shifter—to engine WO48-207 Shifter—for winch WO48-208 Knobs (2 req.) WO48-209 Felt oil retainer for levers WO48-209 Felt oil retainer for levers This power take-off is furnished with Model 150J KING Winch Assembly, and is suitable for driving the KING Winch on the front, and any other equipment on the rear of the Willys Jeep. Has three speeds forward, one speed reverse (by use of regular Jeep transmission)	PART No.	DESCRIPTION			
J50-202 Housing—rear half J50-203 Housing Assembly WO48-204 Sliding Ring (2 req.) WO48-205 Lever (2 req.) WO48-206 Shifter—to engine WO48-207 Shifter—for winch WO48-208 Knobs (2 req.) WO48-209 Felt oil retainer for levers WO48-209 Felt oil retainer for levers This power take-off is furnished with Model 150J KING Winch Assembly, and is suitable for driving the KING Winch on the front, and any other equipment on the rear of the Willys Jeep. Has three speeds forward, one speed reverse (by use of regular Jeep transmission)	J50-201	Housing—front half			
WO48-204 Housing Assembly WO48-204 Sliding Ring (2 req.) WO48-205 Lever (2 req.) WO48-206 Shifter—to engine WO48-207 Shifter—for winch WO48-208 Knobs (2 req.) WO48-209 Felt oil retainer for levers WO48-209 Felt oil retainer for levers WO48-200 Housing Assembly Model 150J KING Winch Assembly, and is suitable for driving the KING Winch on the front, and any other equipment on the rear of the Willys Jeep. Has three speeds forward, one speed reverse (by use of regular leep transmission).	J50-202	1 15	ake-off is furnish	ed with	
WO48-205 WO48-205 Lever (2 req.) WO48-206 Shifter—to engine WO48-207 Shifter—for winch WO48-208 WO48-208 WO48-209 Felt oil retainer for levers WO48-209 Is suitable for driving the KING Winch on the front, and any other equipment on the rear of the Willys Jeep. Has three speeds forward, one speed reverse (by use of regular Jeep transmission).	J50-203	Liana Annonalaise			
WO48-205 Lever (2 req.) WO48-206 Shifter—to engine WO48-207 Shifter—for winch WO48-208 Knobs (2 req.) WO48-209 Felt oil retainer for levers WO48-209 Lever (2 req.) the front, and any other equipment on the rear of the Willys Jeep. Has three speeds forward, one speed reverse (by use of regular Jeep transmission).	WO48-204	Sliding Ping (2 reg.) Model 1303			
WO48-207 Shifter—for winch the rear of the Willys Jeep. Has WO48-208 Knobs (2 req.) three speeds forward, one speed reverse WO48-209 Felt oil retainer for levers (by use of regular leep transmission).	WO48-205	Lever (2 reg.) is suitable to	is suitable for driving the KING Winch on		
WO48-208 Knobs (2 req.) WO48-209 Felt oil retainer for levers (by use of regular leep transmission)	WO48-206	Shifter—to engine the front, an	the front, and any other equipment on		
WO48-208 Knobs (2 req.) WO48-209 Felt oil retainer for levers (by use of regular leep transmission).	WO48-207	Shifter—for winch the rear of t	he Willys Jeep. Ho	as	
WO48-209 Felt oil retainer for levers (by use of regular leep transmission)	WO48-208	Knobs (2 req.) three speeds		The state of the s	
(by use of regular seep framsimission).	WO48-209	E-It -: I water may tay lavore			
WO48-210 Coupling	WO48-210	Coupling	goldi seep iransi	mission).	
WO48-211 Oil Seal—2" OD x 11/2" ID	WO48-211				
WO48-212 Main P.T.O. Shaft		*11************************************			
WO48-213 Clutch Gear Hub					
WO48-214 Oil Seal-1%" OD x 1" ID	To the second of			and office toops to 12/37 and	
WO48-215 P.T.O. Shaft—1" x 334" PART No. DESCRIPTION			PART No.	DESCRIPTION	
WO48-216 Sprocket—16 footh					
WO-TO-ZI7 CIOICII OPIOCROI IIIO					
WO40-210 Odsker Beitreen international and an arrangement of the last					
WO TO ZIZ OPINI (Z TO Q)					
110-10-220 Dail (2 10-91)		Ball (2 req.)			
WO-10-221 Boshing for shiner ben and spring (2 10-4)					
		3.133			
J50-224 Dowel Pins (2 req.) WO48-241 Cap Screw WO48-225 Thrust Washer—1" x 1%" x .040" WO48-242 Woodruff Keys—#15 (2 req.)					
J50-226 Roller Chain and connecting link W048-243 Key—for W048-213					
WO48-227 P.T.O. Shaft Spacer—1" x 134" x .189" WO48-244 Keyfor WO48-210					
J50-228 Gasket—Between Housing WO48-245 Socket cap screws (5 req.)					
WO48-230 Ball bearing—%" ID WO48-246 Lock washer					
WO48-231 Ball bearing—1" ID (3 req.) WO48-247 Nut—%" N.F.				Nut-%" N.F.	
WO48-232 Shim—010" thick brass (2 reg.) WO48-248 Lock washer—%" Hi-Collar (5 req.)					
WO48-233 Shim046" thick (2 req.) WO48-249 Bronze bushing-1" x 11/4" x 11/4" (2 req.)			WO48-249	Bronze bushing-1" x 11/4" x 11/4" (2 req.)	

TAKE-OFF FOR WILLYS



This power take-off is lubricated from transfer case by oil passage holes. Check oil level in transfer case after operating a short time.



WO48-227

WO48-231

J50-228

P.T.O. Shaft Spacer

Ball Bearing (4 req.)

Housing Gasket

WORKS INC. IRON

center

WO48-245

WO48-248

Socket Cap Screw (5 req.)

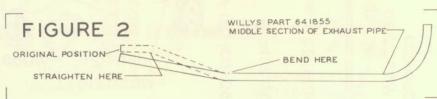
Lock Washer-HiCollar (5 req.)

INSTALLATION INSTRUCTIONS MODEL 150J AND 151J KING WINCHES ON CJ-5 WILLYS JEEP

1. EXHAUST PIPE MUST BE MOVED from above transmission cross member to below transmission cross member. Remove center section of exhaust pipe. Heat front exhaust pipe section close to manifold and bend towards Jeep

frame approximately 34". Heat this front section again in the curve and bend down

134" or until the end is below transmission cross member (Fig. 1). Heat and straighten out first kink in center section of exhaust pipe. Heat and bend down at second kink in center sec-



WILLYS PART

64 185 6

FIG.3

EXHAUST PIPE CLAMP ~473-13

EXHAUST PIPE SUB

CUT OUT TO CLEAR

BEND UP

JEEP FLOOR

POWER TAKE-OFF

473-12

GAS

TANK

FIGURE 4

FIGURE 1

HEAT HERE

WILLYS PART 641856

OF EXHAUST PIPE

ORIGINAL POSITION

NEW POSITION

tion of exhaust pipe until this section lines up with front exhaust pipe. (Fig. 2) Connect front and center sections of exhaust pipe with exhaust pipe sub and extra clamp which is furnished with winch installation (Fig. 3).

2. TO INSTALL MODEL 50 POWER TAKE-OFF. (MODEL 150J WINCH ASSEMBLY). Power take-off lever hole in Jeep floor must be cut out 34" wider to the left side of Jeep. The Jeep floor must also be hammered up slightly in order to clear power take-off (Fig. 4). The two shift levers of power take-off must be removed.

Remove the five pipe plugs. Install power take-off by using the five 36 x 1 Allen head cap screws and Hi-collar lock washers. It would be helpful in installing these five cap screws to use a 3%" drive speed wrench with universal joint and a 5/16" hexagon tool approximately 3" long. Reinstall the five pipe plugs and shift levers.

3. TO INSTALL MODEL 51 POWER TAKE-OFF. (MODEL 151J WINCH ASSEMBLY). Remove the shift lever and the five pipe plugs. Install the power take-off and the five 38 x 1" Allen head cap screws with Hi-collar lock washers. It would be helpful in installing these

five cap screws to use a 3/8" drive speed wrench with Universal joint and a 5/16" hexagon tool approximately 3" long. Reinstall the five pipe plugs and shift lever.

4. INSTALL WINCH DRIVE SHAFTS. Install shaft bearing bracket on Jeep bell housing by removing nut from stabilizer cable bolt and the next bolt in the bell housing towards the center of Jeep. This shaft bearing bracket mounts on the front of bell housing with the bearing towards the front of Jeep. Use the 3 x 23/4" cap screw furnished with winch installation. Bolt this bearing bracket in place with the 22" (shorter shaft) inserted. Install rear universal joint. Install center universal joint. Install 27%" (longest shaft). This front shaft goes between front cross member and bell crank arm. Install front universal joint.

5. REMOVE JEEP FRONT BUMPER. It is advised to drill out the bumper rivets to prevent distortion of Jeep frame by chiseling off the rivet heads.

6. INSTALL WINCH ASSEMBLY. Slide bumper assembly in place with winch in place. Connect front universal joint to winch shaft as bumper assembly is installed. Install all bumper assembly bolts before tightening any of them.

7. CHECK ALL UNIVERSAL JOINTS to be sure that each yoke is evenly spaced over each key in shafts. Tighten all universal joint set screws. It is advised to countersink each set screw into the shaft by drilling with 5/16" drill.

8. INSTALL THE CABLE. Remove cable clamp from winch drum. Insert cable through guide rollers and out through hole in winch drum. Clamp cable to drum with end of cable even with top of clamp. Cut off the clamp bolts with hacksaw or chisel.

9. CHECK OIL IN WINCH HOUSING. Use EP140 gear oil if necessary. Grease all fittings on winch and the shaft bearing bracket. Oil sliding parts on drum clutch. The power take-off is oiled from the transfer case.

10. WIND THE CABLE ON THE WINCH DRUM.

OPERATING INSTRUCTIONS FOR KING WINCH MODELS 150J AND 151J FOR WILLYS CJ-5 JEEP

The only difference between Model 150J and 151J KING Winches is the power take-off. The Model 150J installation has our Model 50 power take-off, which provides for power to the rear of the truck in addition to driving the winch on the front. The Model 151J installation uses our Model 51 power take-off which provides for driving the winch on the front only.

- 1. After the winch has been properly installed, as per installation instructions, be sure that it has been properly lubricated by using EP 140 gear oil in the winch housing and chassis lubricant in all grease fittings. The power takeoff is lubricated by the oil from the transfer case. After the unit has been run enough to wind on the cable, check the oil level in the transfer case and fill to the recommended level.
- 2. When the winch is to be used for the first time, be sure that the drum clutch lever, Part No. 199, is down, which assures that the clutch is disengaged from the drum. Then pull the cable out and attach to whatever object is to be raised or is to be used as an anchor for pulling the Jeep. Pull out the No. 197 pin, which will release the No. 199 lever, thereby engaging the clutch with the drum. Should the clutch not fully engage, slightly rotate the drum by hand until the pins enter the slots in the drum clutch.
- 3. The rest of the operation of this winch is done from the Jeep cab. Place the transfer case shifter into neutral. Then the regular gear shift lever of the transmission and the Jeep clutch are used to operate the power take-off. Use the low gear of the transmission for winching as much as possible. To reverse the winch or lower the load, simply place the transmission in reverse position and release the Jeep clutch.

- 4. In case the winch is a Model 150J using our Model 50 power take-off, first engage the right-hand power take-off lever. This will engage the power take-off to the transfer case and will rotate the rear coupling on the power take-off, thereby driving whatever mechanism is used on the rear of the Jeep without rotating the winch mechanism. Next engage the left-hand lever on the power take-off and release the Jeep clutch, which will put the winch in operation.
- In case the winch model is our 151J
 using the Model 51 power take-off,
 merely engage the only lever on this
 power take-off and release the Jeep
 clutch.
- When it is desirous to stop the winch merely depress the Jeep clutch and move the transmission lever to neutral.
- 7. Whenever the winch is not in use and the cable is wound completely on the drum, BE SURE that the drum clutch is disengaged by moving the drum clutch lever to a down position and disengage the power take-off.

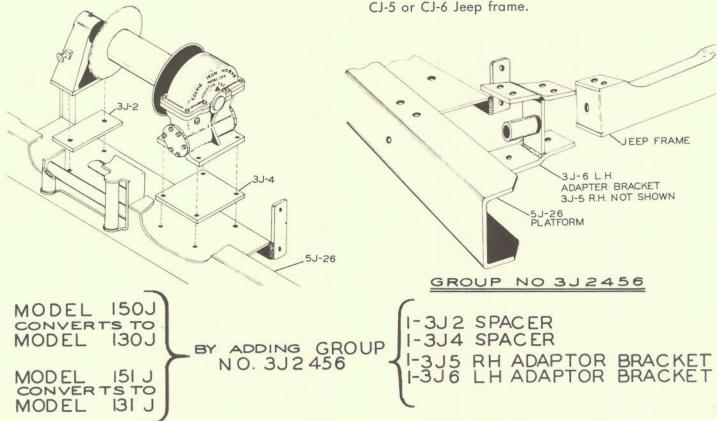
Attach the envelope containing the installation and operating instructions for the winch to the dashboard of the Jeep, or see that the operators of this equipment are familiar with these instructions before destroying them.



MODEL 130J AND MODEL 131J KING WINCH FOR CJ-2A, CJ-3A AND CJ-3B WILLYS JEEP

The ONLY difference in a Model 130J and a Model 150J or a Model 131J and a Model 151J is that the Model 130J and 131J have ½" spacers between the

winch platform and the winch housing and winch bracket, also frame adaptor brackets which extend the CJ-2A, CJ-3A, or CJ-3B Jeep frame to the same length as the Cl-5 or Cl-6 Jeep frame.

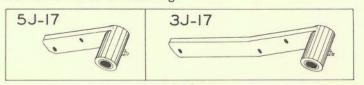


A Model 130J can be converted to a Model 150J by discarding the Group 3J2456 parts.

A Model 131J can be converted to a Model 151J by discarding the Group 3J2456 parts.

When a Model 130J or Model 131J is shipped the 3J-2 spacer and 3J-4 spacer are installed under the winch. Also the 3J-5 R. H. Adaptor bracket and 3J-6 L. H. Adaptor bracket are attached to the 5J-26 winch platform. It is important to remember that when transferring a Model 130J or Model 131J to the CJ-5 or CJ-6 Jeep, the entire installation will fit without alteration or buying any additional parts.

Due to the difference in the bell-housing of the F-head and L-head engine the 5J-17 bearing will fit the CJ-3B, CJ-5, and CJ-6 Jeeps. For the CJ-2A and CJ-3A Jeeps we furnish a 3J-17 bearing.



This 3J-17 bearing will not be furnished unless it is specified that the winch is to be installed on either the CJ-2A or CJ-3A Jeep.

(Note: The 5J-17 bearing will work on all model jeeps, except only one bolt can be used for attaching to the CJ-2A and CJ-3A)

In all description information, installation instructions the Model 150J is identical with Model 130J and Model 151J is identical with Model 131J.

Models 130J and 131J include the Group 3J2456 parts. A Model 150J can be converted to a Model 130J by purchasing the Group 3J2456 parts.

A Model 151J can be converted to a Model 131J by purchasing the Group 3J2456 parts.

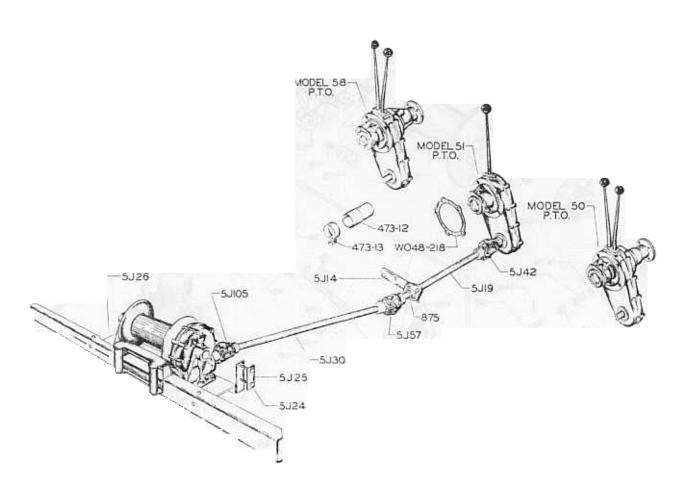
When installing a Model 130J or Model 131J on a CJ-2A it is necessary to drill 3 holes in each end of Jeep frame through the 3J-5 and 3J-6 adaptor bracket. (If desired these adaptor brackets may be welded to the end of the Jeep frame).



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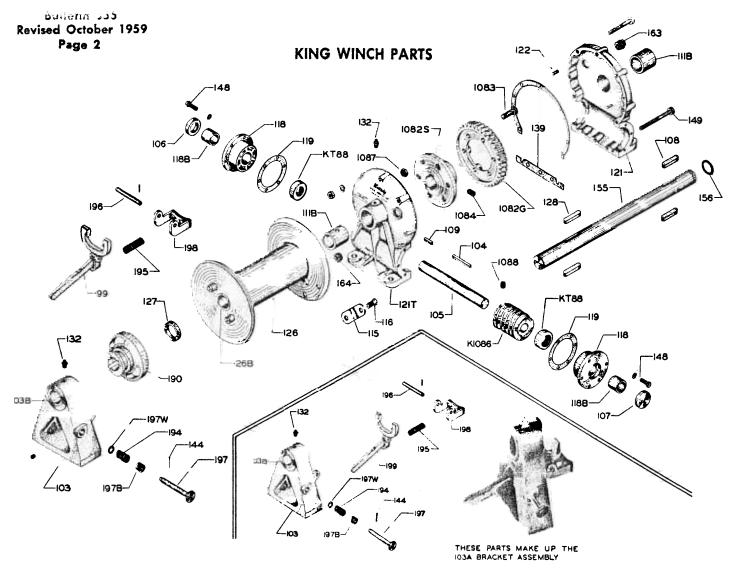
MODELS 151J, 150J, AND 158J POWER TAKE-OFF DRIVEN FRONT-MOUNT KING WINCHES FOR CJ-5 AND CJ-6 'JEEP' UNIVERSAL

INSTALLATION PARTS
FOR MODELS 151J, 150J, AND 158J KING WINCHES



PART NO	D. DESCRIPTION	PART NO.	DESCRIPTION
5J14	Bearing bracket	5J105	Front universal joint
5J15	Bag of installation bolts, keys, etc.		$(7/8-1/4 \times 7/8-3/16)$
5J19	Rear drive shaft, 19" long	875	Spherical bearing
5J24	Platform clamp bolt (4 required)	913	1/4 x 1 Woodruff key (4 required)
5J25	Platform clamp	473-12	Exhaust pipe sub
5J26	Winch platform	473-13	Exhaust pipe clamp
5J30	Front drive shaft 30-1/2" long	WO48-21	l8 PTO gasket
5J42	Rear universal joint $(7/8-1/4 \times 1 - 1/4)$		Cable 150' 5/16" 6 x 19 with hook and clamps
5J57	Center universal joint (7/8-1/4 x 7/8-1/4)	Model S	50 Power Take-Off 51 Power Take-Off 58 Power Take-Off

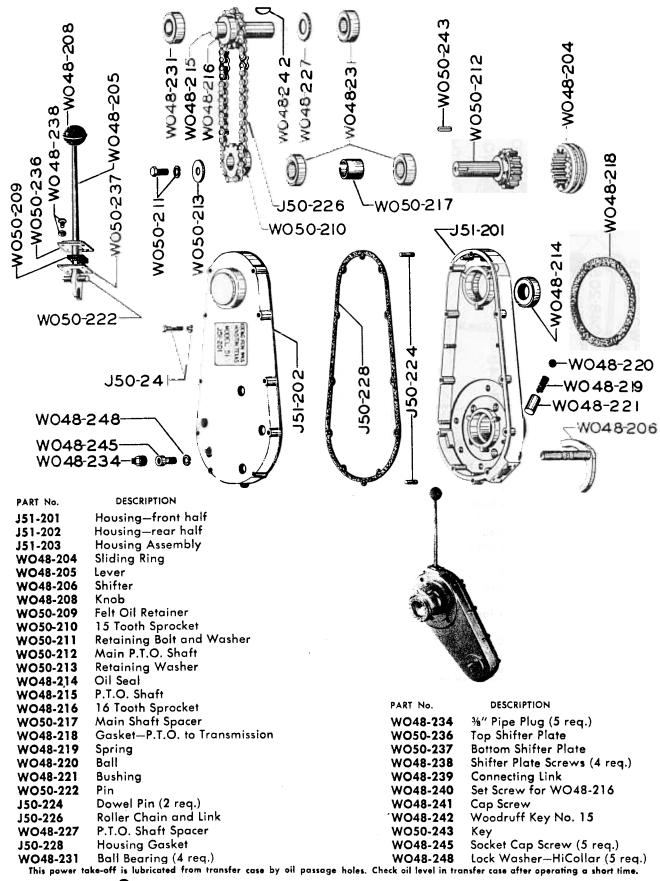




Part No.	Description	Part No.	Description
103	Bracket w/bushing	145	Housing Bolt (7 Req'd)
103B	Bushing	148	Bearing Holder Bolt (12 Req'd)
103A	Bracket Assembly	149	Allen head bolt (3 required)
104	Worm Key	155	Drum Shaft W/Keys
105	Worm Shaft	156	O-Ring
106	Oil Seal	163	Grease Plug
107	Plug	164	Countersunk Grease Plug
108	Spider Key (2 Req'd)	190	Drum Clutch
109	Worm Shaft Key	193	Set Screw for 197
111B	Bushing (2 Req'd)	194	Spring
115	Cable Clamp	195	Brake Spring
118	Bearing Holder with Bushing	196	Pin
	(2 Req'd)	197	Pin
118B	Bushing (2 Req'd)	197B	Bushing
119	Gasket (4 Reg'd)	197W	Washer
iżít	Housing half, tapped	198	Brake Shoe
121	Housing half	199	Shifter Lever
122	Dowel Pin (2 Req'd)	KT88	Thrust Bearing (2 Req'd)
126	Drum W/Bushings	1082G	Left Hand Gear
126B	Bushing (2 Req'd)	10825	Spider
127	Drum Set Collar	1083	Bolt (6 Req'd)
128	Clutch Key (2 Req'd)	1084	Set Screw for Spider
132	Zert Fitting (2 Req'd)	K1086	Left Hand Worm
133	Zert Fitting	1087	Lock Nut (6 Req'd)
139	Gasket (2 Pieces)	1088	Set Screw for Worm
144	Cotter Pin (3 Rea'd)		20, 20,000 101 1101111

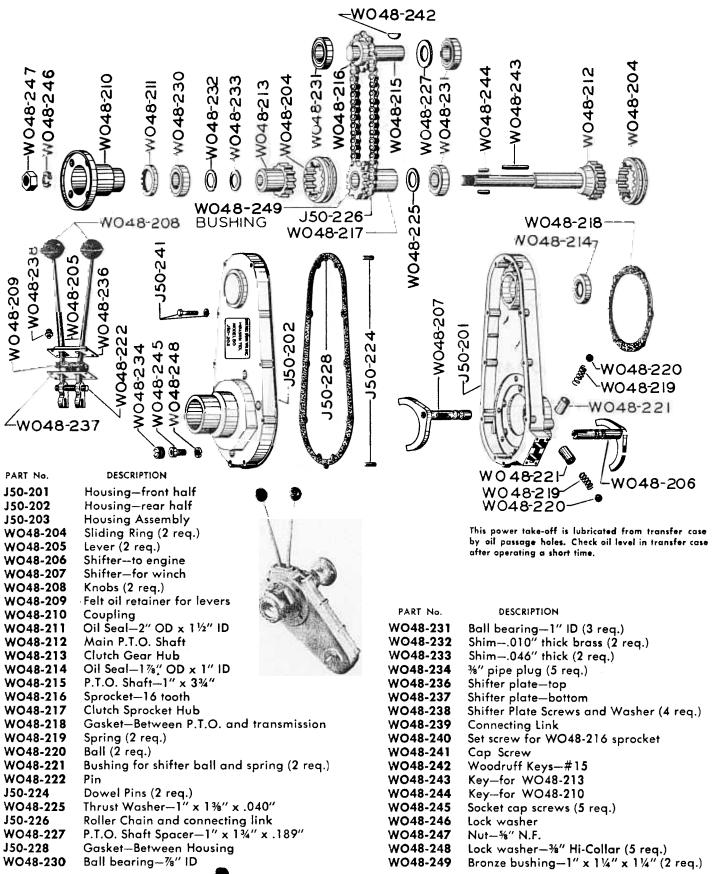


MODEL 51 POWER TAKE-OFF

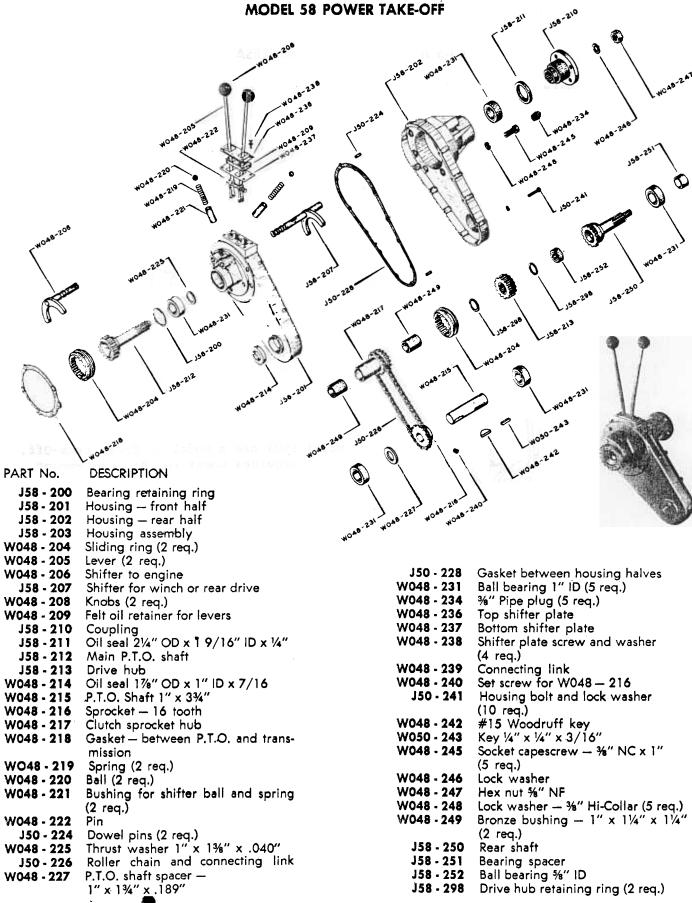




MODEL 50 POWER TAKE-OFF



HOLING IRON WORKS, inc.



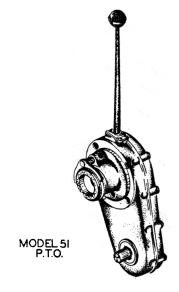


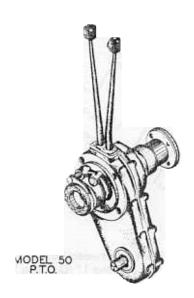
Bullean 555 Revised October 1959 Page 6

MODELS 151J, 150J, AND 158J POWER TAKE-OFF DRIVEN FRONT-MOUNT KING WINCHES FOR CJ-5 AND CJ-6 'JEEP' UNIVERSAL

The only difference between Models 151J, 150J, and 158J KING Winch assemblies is the Power Take-Off.

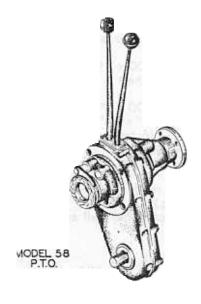
Model 151J has a Model 51 Power Take-Off, which provides for drive to the front of the vehicle only.





Model 150J has a Model 50 Power Take-Off, which provides power to the front-mount winch, and to the rear for the rear-mounted equipment. The rear-mounted equipment can be operated separately, but when the winch is in operation, the rear power take-off shaft will rotate.

Model 158J has a Model 58 Split-Shaft Power Take-Off, which provides power to the front-mount winch, and to rear-mounted equipment. With this split-shaft power take-off, the front- or rear-mounted equipment can be operated separately as desired, but not simultaneously.

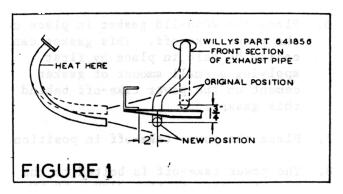


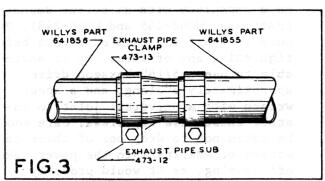


INSTALLATION INSTRUCTION FOR KING WINCH MODELS 151J, 150J AND 158J FOR CJ-5 AND CJ-6 'JEEP' UNIVERSAL

EXHAUST PIPE MODIFICATION FOR CJ-5 'JEEP' UNIVERSAL BUILT PRIOR TO SERIAL #93763, AND CJ-6 'JEEP' UNIVERSAL BUILT PRIOR TO SERIAL #16485.

1. Exhaust pipe must be moved from above the transmission cross-member to below the transmission cross-member. Remove center section of exhaust pipe. Heat front exhaust pipe section close to manifold, and bend towards left-hand vehicle frame rail approximately 3/4". Heat this front section again in the curve, and bend down 1-3/4" or until the end clears the bottom of transmission cross-member. (Fig. 1). Heat and straighten out first kink in center section of exhaust pipe. Heat and bend down at second kink in center section of exhaust pipe until this section lines up with front exhaust pipe (Fig. 2). Connect front and center sections of exhaust pipe with exhaust pipe sub (Part No. 473-12), and extra exhaust pipe clamp (Part No. 473-13), which is furnished with winch installation.





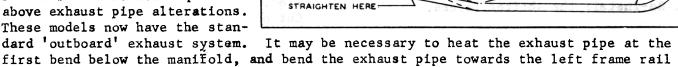
WILLYS PART 64 1855

MIDDLE SECTION OF EXHAUST PIPE

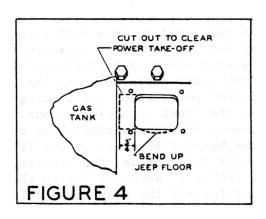
BEND HERE

CJ-5 'JEEP' Universal beginning with Serial #93763, and CJ-6 'JEEP' Universal beginning with Serial #16485 DO NOT require the above exhaust pipe alterations. These models now have the standard 'outboard' exhaust system.

approximately 1/4"



- 2. Remove the power take-off lever hole cover in vehicle floor. If it is a Model 150J winch assembly with a Model 50 power take-off, or Model 158J winch assembly with a Model 58 power take-off, it is necessary to cut hole in vehicle floor 3/4" wider to the left side of vehicle. The vehicle floor must also be hammered up slightly in order to clear power take-off, (Fig. 4). Installing Model 151J winch assembly with a Model 51 power take-off, it is not necessary to cut or hammer vehicle floor.
- Remove the power take-off opening cover plate from the transfer case.



4. Remove the power take-off shift levers or lever by removing the four WO48-238 screws and lifting the lever assembly from the power take-off.



UNderwood 9-3547 ● P. O. BOX 7726 ● HOUSTON 7, TEXAS

FIGURE

ORIGINAL POSITION

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- 5. Remove the five WO48-234 plugs from the power take-off. (These are standard square head 3/8" pipe plugs.)
- 6. Place the WO48-218 gasket in place on the power take-off. This gasket can easily be held in place by first applying a small amount of gasket cement on the power take-off behind this gasket.
- 7. Place the power take-off in position.
- 8. The power take-off is bolted to the transfer case by five 3/8" x 1" Allen head capscrews with Hi-collar washers (Part Nos. W048-245 and W048-248). Be sure to start all five capscrews before tightening any of them. It is advisable to use a 5/16" hexagon drive approximately 3" long, and a speed wrench with a Universal joint to install these five capscrews. Care should be taken not to drop one of these capscrews or washers into the power take-off housing, as it would probably require dis-assembling the power take-off in order to remove these parts.
- 9. Replace and tighten the five WO48-234 plugs.
- 10. Re-install the shifter levers.
- 11. To install winch drive shafts, first remove nut from stabilizer cable bolt on the bell housing, and the next bolt on the bell housing towards the center of the vehicle. This bolt is replaced by the 3/8" x 2-3/4" capscrew furnished with winch installation. Using the stabilizer cable bolt and the 3/8" x 2-3/4" bolt, mount the bearing bracket on the front of the bell housing. Now loosen the two hearing clamp bolts on the bearing bracket. Insert 19" (short) shaft into the bearing bracket. Place a 1/4" x 1" Woodruff key on the shaft and install the rear universal joint. Before installing center universal joint, place a 1/4" x 1" Woodruff key on the rear shaft and on one end of the front shaft. The front shaft, (30-1/2" long) goes above the bell crank arm. Install the front universal joint, making sure the 1/4" x 1" Woodruff key is on the front shaft. DO NOT tighten set screws at this time.

- 12. To prevent distortion of the vehicle frame when removing the front bumper, it is advisable to drill out the bumper rivets. DO NOT chisel off the rivet heads.
- 13. Slide bumper assembly in position.
 Connecting front universal joint to
 winch shaft as bumper assembly is
 being installed. BE SURE to install
 all bumper assembly bolts before
 tightening any of them.
- 14. Check all universal joints to be sure that each yoke is evenly spaced over key in shafts. Tighten all universal joint set screws. It is advisable to countersink each set screw into the shaft by drilling with a 5/16" drill. Tighten bearing clamp bolts in bearing bracket.
- 15. Install the winch cable. Remove one of the 3/8" x 7/8" capscrews holding the cable clamp to winch drum and loosen the other 3/8" x 7/8" capscrews until it is almost out of the winch drum. Pull cable through guide rollers and out through the hole in the winch drum, until the end of the cable is even with top of the clamp. Replace the 3/8" x 7/8" capscrews and tighten cable clamp. Cut off the capscrews flush with the inside of the winch drum with a sharp chisel or hacksaw.
- 16. Check oil in winch housing. Use EP-140 gear oil if necessary. Grease all fittings on winch and the shaft bearing bracket. Oil sliding parts on the drum clutch. The power take-off is oiled from the transfer case.
- 17. Wind the cable on underside of winch drum. Care should be taken to wind the cable evenly and as tightly as possible. If enough room is available, attach the hook to a solid anchor, and pull on emergency brake slightly. Wind the cable onto the drum by allowing the winch to pull the vehicle across the shop floor. After all the cable is wound on the drum, engage the hook on the bumper flange. Disengage the drum clutch by pulling up on the drum clutch lever (Part 199). The drag brake will prevent the cable from unwinding.



OPERATING INSTRUCTIONS FOR KING WINCH MODELS 151J, 150J, AND 158J FOR CJ-5 AND CJ-6 'JEEP' UNIVERSAL

IMPORTANT - The drum clutch should always be disengaged when the winch is not in operation. BE SURE to check the oil level in the transfer case, and fill to the correct level with the Willys recommended oil for your climate.

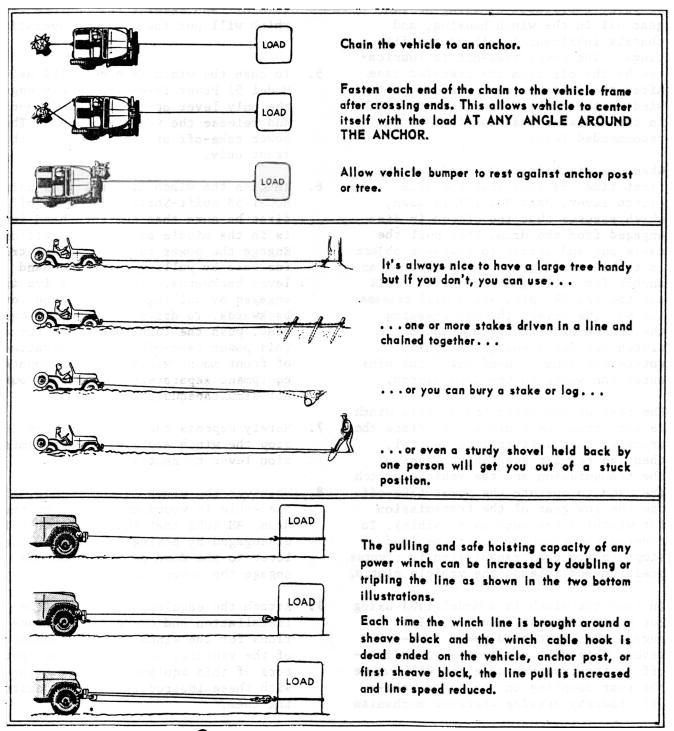
- 1. After the winch has been properly installed, as per installation instructions, be sure that it has been properly lubricated by using EP-140 gear oil in the winch housing, and chassis lubricant in all grease fittings. The power take-off is lubricated by the oil from the transfer case. After the unit has been run enough to wind on the cable, check the oil level in the transfer case and fill to the recommended level.
- 2. When the winch is to be used for the first time, be sure that the drum clutch lever, Part No. 199, is down, which assures that the clutch is disengaged from the drum. Then pull the cable out and attach to whatever object is to be raised or is to be used as an anchor for pulling the vehicle. Pull out the No. 197 pin, which will release the No. 199 lever, thereby engaging the clutch with the drum. Should the clutch not fully engage, slightly rotate the drum by hand until the pins enter the slots in the drum clutch.
- The rest of the operation of this winch is done from the vehicle cab. Place the transfer case shifter into neutral, then the regular gear shift lever of the transmission and the vehicle clutch are used to operate the power take-off. Use the low gear of the transmission for winching (as much as possible). To reverse the winch or lower the load, simply place the transmission in reverse position and release the vehicle clutch.
- 4. In case the winch is a Model 150J using our Model 50 Power Take-Off, first engage the right-hand power take-off lever. This will engage the power takeoff to the transfer case and will rotate the rear coupling on the power takeoff, thereby driving whatever mechanism

- is used on the rear of the vehicle without rotating the front-mount winch. Next engage the left-hand lever on the power take-off and release the vehicle clutch, which will put the winch in operation.
- 5. In case the winch is Model 151J using Model 51 Power Take-Off, merely engage the only lever on this power take-off and release the vehicle clutch. This power take-off provides power to the front only.
- 6. In case the winch is Model 158J using Model 58 Split-Shaft Power Take-off, first be sure that the left-hand lever is in the middle or neutral position. Engage the power take-off to the transfer case by pulling the right-hand lever backwards. The winch drive is engaged by pulling the left-hand lever backwards. To drive rear-mounted equipment, push the left-hand lever forward. This power take-off allows operation of front-mount winch and rear-mounted equipment separately as desired, but not simultaneously.
- 7. Merely depress the vehicle clutch to stop the winch and move the transmission lever to neutral.
- 8. Whenever the winch is not in use, and the cable is wound completely on the drum, BE SURE that the drum clutch is disengaged by moving the drum clutch lever to the down position and disengage the power take-off.
- Attach the envelope containing the installation and operating instructions for the winch to the dashboard of the vehicle, or see that the operators of this equipment are familiar with these instructions before destroying them.



OPERATING INSTRUCTIONS FOR KING WINCH MODELS 151J, 150J, AND 158J FOR CJ-5 AND CJ-6 'JEEP' UNIVERSAL

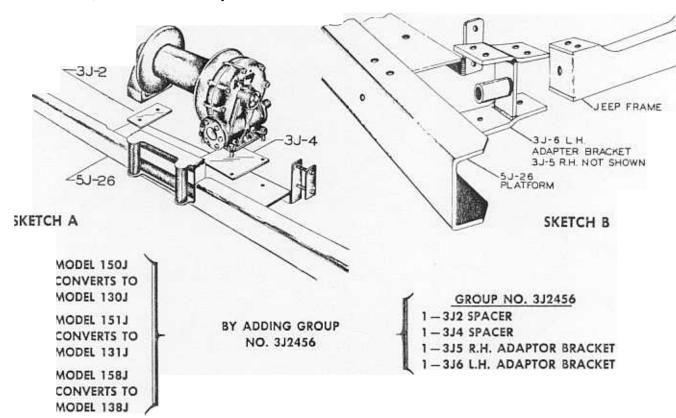
HELPFUL HINTS TO GET MORE WORK FROM YOUR KING WINCH



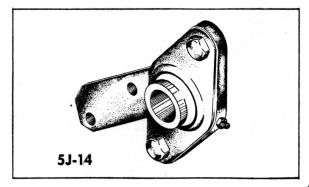
Kozuig IRON WORKS, inc.

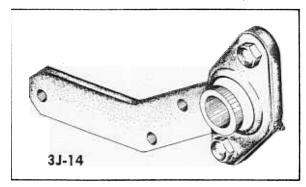
MODELS 130J, 131J, AND 138J KING WINCHES FOR CJ-2A, CJ-3A, AND CJ-3B 'JEEP' UNIVERSAL

KING Winch Models 130J, 131J, and 138J, have two 1/4" spacers (see Sketch A) and two adapter brackets (see Sketch B). These parts are factory installed.



When installing a Model 130J, 131J, or 138J on a CJ-2A, it is necessary to drill three holes in each end of the vehicle frame through the 3J-5 and 3J-6 adapter bracket. (If desired, these adapter brackets can be welded to the end of the vehicle frame.)





The 5J-14 bearing fits the CJ-3B, CJ-5, and CJ-6 'JEEP' Universal. For the CJ-2A or CJ-3A, specify bearing 3J-14.

NOTE: This entire installation will transfer to a CJ-5 or CJ-6 by removing two spacers (see Sketch A), and two adapter brackets (see Sketch B).

